

We claim:

1. A method for increasing the throughput of a clinical analyzer adapted to perform a number of different assays using reagents inventoried in at least two servers, wherein a first pattern of assays is to be performed in a first time period and a different second pattern of assays is to be performed in a different second time period, the method comprising duplicating reagents required to conduct a number of assays in the first pattern of assays within the at least two servers.
2. The method of claim 1 wherein the first pattern of assays has a larger portion of a first group of assays and a smaller portion of a second group of assays and wherein the second pattern of assays has a larger portion of said second group of assays and a smaller portion of said first group of assays.
3. The method of claim 2 wherein the analyzer comprises a rotatable reaction carousel having cuvette ports for supporting said assays, each and every cuvette port being returned to an original starting position in said carousel in a full operational cycle time of the carousel, and wherein said first group of assays comprise assays that are completed in less than one half of said operational cycle time.
4. The method of claim 3 wherein said second group of assays comprise assays that require more than one half of said operational cycle time to be completed.
5. The method of claim 1 further comprising selecting reagents from whichever of the at least two servers has the shorter backlog of demand with which to perform assays in the first pattern of assays.

6. An analytical analyzer adapted for automatically conducting a number of clinical assays on patient samples in reaction cuvettes, said analyzer comprising:

a rotating reaction carousel supporting a cuvette carousel having cuvette ports adapted to receive a plurality of reaction cuvettes suitable for conducting clinical assays therein, wherein each and every cuvette port is returned to an original starting position in said carousel in a full operational cycle time of the carousel;

at least two servers inventorying reagents required for performing said clinical assays; and,

analyzer control means for performing a first pattern of assays in a first time period and a different second pattern of assays in a different second time period by duplicating reagents required to conduct a number of assays in the first pattern of assays within the at least two servers.

7. The analyzer of claim 6 wherein the first pattern of assays has a larger portion of a first group of assays and a smaller portion of a second group of assays and wherein the second pattern of assays has a larger portion of said second group of assays and a smaller portion of said first group of assays.

8. The analyzer of claim 7 wherein said first group of assays comprise assays that are completed in less than one half of said operational cycle time.

9. The analyzer of claim 8 wherein said second group of assays comprise assays that require more than one half of said operational cycle time to be completed.

10. The analyzer of claim 9 wherein said analyzer control means selects reagents from whichever of the at least two servers has the shorter backlog of demand with which to perform assays in the first pattern of assays.